ABSTRACT

A novel and useful distributed synchronization mechanism. The synchronization loop of each station on the shared media based network considers only synchronization signals received having a time phase earlier than the time phase of its internal clock. From among

5   the plurality of synchronization signals received by a given station having a time phase earlier than that of its internal clock, only the earliest of the received synchronization signals is considered. This allows the use of a second order synchronization tracking loop wherein both the phase and rate of the internal clock are tracked and adjusted. The station with the fastest internal clock effectively functions as an ad-hoc synchronization master for all stations

10   in a given maximum connected group.